Approved for use through 11/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitut	NFORMATION DISCLOSURE STATEMENT BY APPLICANT	Complete if Known			
				Application Number	10/750,622
INFO	RMATIC	ON DIS	CLOSURE	Filing Date	December 31, 2003
STA	TEMENT	BY A	PPLICANT	First Named Inventor	Sue K. DeNise
				Art Unit	1637
(Use as many sheets as necessary)			necessary)	Examiner Name	David C. Thomas
Sheet	1	of	4	Attorney Docket Number	MMI-0102 (14972.105004)

			U.S. PATENT	OCUMENTS	
Examiner Initials *	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear
	AA	US-6,103,446	08/15/2000		
	AB	US- 2003/0129609 A1	07/10/2003		
·	AC	US- 2003/0104424 A1	06/05/2003		
	AD	US- 2003/0190644 A1	10/09/2003		
	AE	US- 6,218,119	04/17/2001		-
	AF	US- 2002/0123058 A1	09/05/2002		
	AG	US- 2002/0137139 A1	09/26/2002		
	AH	US- 2002/0137160 A1	09/26/2002		
	Al	US- 2002/0119442 A1	08/29/2002		
	AJ	US- 2002/0107211 A1	08/08/2002		
	AK	US- 6,458,531	10/01/2002		
	AL	US- 6,701,869	03/09/2004		
	AM	US- 2003/0219819 A1	11/27/2003		
	AN	US- 6,383,751 B1	. 05/07/2002		
	AO	US- 5,582,987	12/10/1996		
		US-			
		US-			
		US-			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*		Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,			
	Cite No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	7⁰		
	AP	WO02/076190 A2	10/03/2002					
	AQ	WO02/09510 A2	07/02/2002					
	AR	WO02/072871 A2	09/19/2002					
	AS	W001/21801 A1	03/29/2001					
	AT	WO02/40709 A2	05/23/2002					
	AU	WO02/059374 A1	08/01/2002					

Exam Signa		Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. \(^3\) Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \(^4\) For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \(^3\) Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \(^6\) Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 11/30/2007. OMB 0851-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE der the Paperwork Reduction Act of 1995, no persons are require

Substitu	ute for form 1449A/P	то			Complete if Known
				Application Number	10/750,622
INF	ORMATION	N DIS	CLOSURE	Filing Date	December 31, 2003
STA	TEMENT I	BY A	PPLICANT	First Named Inventor	Sue K. DeNise
				Art Unit	1637
	(Use as many s	heets as	necessary)	Examiner Name	David C. Thomas
Sheet	2	of	4	Attorney Docket Number	MMI-0102 (14972.105004)

			U.S. PATENT	DOCUMENTS	
Examiner Initials *	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear
		US-			
		US-	7,		
		US-			
		US-			11.
··		US-			

Examiner Initials*		Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,	
	Cite No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶
	BA	WO04/013346 A2	02/12/2004			
	BB	WO02/064749 A2	08/22/2002			
			,			

Examiner Signature	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

	Substitute	for form 1449	B/PTO			Complete if Known			
				001.001		Application Number	10/750,622		
INFORMATION DISCLOSURE		Filing Date	December 31, 2003						
	STATEMENT BY APPLICANT		First Named Inventor	Sue K. DeNise					
						Art Unit	1637		
	(Use as many sheets as necessary)					Examiner Name	David C. Thomas		
$\overline{}$	Sheet	3	T 0	4	-	Attorney Docket Number	MMI-0102 (14972.105004)		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	CA	ZHANG, H.M., et al., "Rapid Communication: A Novel DNA Polymorphism of the Bovine Calpain Gene Detected by PCR-RFLP Analysis"; J. Anim. Sci. 1996; 74:1441	
11.7	СВ	DAVIS, G.P., et al., "The Impact of Genetic Markers on Selection", J. Anim. Sci 1998, 76:2331-2339	
	СС	DENISE, S.K., et al., "Genetic Parameter Estimates for Postweaning Traits of Beef Cattle in a Stressful Environment", J. Anim. Sci. 1989, 67:2619-2626	
	CD	DU, F.X., et al., "Heterozygosity for Genes Influencing a Quantitative Trait", J. Anlm. Sci. 2002, 80:1478-1488	
	CE	UNANIAN, M.M., et al., "Rapid Communication: Polymerase Chain Reaction-Restriction Fragment Length Polymorphism in the Bovine Growth Hormone Gene", J. Anim. Sci. 1994, 72:2203	
-	CF	ZHANG, H.M., et al., "Rapid Communication: Polymerase Chain Reaction-Restriction Fragment Length Polymorphism Analysis of the Bovine Somatotropin Gene", J. Anim. Sci. 1993, 71:2276	
	CG	ZHANG, H.M., et al., "Rapid Communication: Diallelic Single-Stranded Conformational Polymorphism Detected in the Bovine Prolactin Gene", J. Anim. Sci. 1994, 72:256	
	СН	AX, R.L., et al. "New developments in managing the bull: Factors Affecting Calf Corp: Biotechnology of Reproduction", CRC Press, 2001.	
	CI	DENISE, S.K., et al., "Genetic Technologies: Factors Affecting Calf Corp: Biotechnology of Reproduction", CRC Press, 2001	
	C1	DENISE, R.S.K., et al. ""Genetic and environmental aspects of the growth curve parameters in beef cows", J. Anim. Sci. 1985, 61:1431	
	СК	DENISE, R.S.K., et al., "Relationships among postweaning weights and gains of cattle raised under range and gain test environments", J. Anim. Sci. 1987, 64:969	
	CL	DENISE, R.S.K., et al., "Relationships among udder shape, udder capacity, cow longevity and calf weights", J. Anim. Sci. 1987, 65:366	
	СМ	TANIDA, H., et al., "Genetic aspects of longevity in Angus and Hereford cows", J. Anim. Sci. 1988, 66:640	

		1
Examiner	Date	ĺ
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b(11-07)

Approved for use through 11/30/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO Complete if Known Application Number 10/750,622 INFORMATION DISCLOSURE Filing Date December 31, 2003 STATEMENT BY APPLICANT First Named Inventor Sue K. DeNise Art Unit 1637 (Use as many sheets as necessary) Examiner Name David C. Thomas Attorney Docket Number Sheet MMI-0102 (14972.105004)

Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CN	ZHANG, H.M., et al., "Nucleotide sequence determination of a bovine somatotropin allele", An. Genetics., 1993, 23:578	
	со	LAGZIEL, A., et al., "Geographic and breed distribution of an MspI PCR-RFLP in the bovine growth hormone (bGH) gene", Anim Genet. 2000, 31:1-4	
	СР	DENISE, S.K., et al., "The use of genetic markers in dairy and beef cattle improvement: Proc. Southwest Nutr. And Manage", Conf., Tempe, AZ 1993	
	cq	DENISE, S.K., et al., "Genetic screening for disease and production: Proc. Western Canadian Dairy Sem.", Red Deer, Alberta 1993	
	CR	DENISE, S.K., et al., "Incorporation of molecular genetic information into genetic prediction models: Proc. Genetic Prediction Workshop, Beef Improvement Federation", Kansas City, Jan. 1994	
	cs	DENISE, S.K., et al., "Gene mapping, marker-assisted selection, QTLs-Boiling it down to cowboy lingo. Proc. Beef Improvement Federation Annual Meeting", Des Moines, Iowa, June 1994	
	СТ	DENISE, S.K., *Biotechnology and Animal Breeding: What can we use today and what does the future hold?* Great Plains Beef Cattle Handbook 1994	

Farancia	Dete	Ì	
Examiner	Date	Ĭ	
Cianatura	Considered		
Signature	Considered		
-			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individuol case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.